

ATOMIC ENERGY *newsletter*®

A SERVICE FOR INDUSTRY BUSINESS ENGINEERING AND RESEARCH
ROBERT M. SHERMAN, EDITOR. PUBLISHED BI-WEEKLY BY ATOMIC ENERGY NEWS CO., 1000 SIXTH AVENUE, NEW YORK 18, N. Y.

Dear Sir:

July 5, 1960
Vol. 23...No. 11

Additional Agreement for Cooperation has been signed by USAEC with EURATOM; existing USAEC agreements with eleven other countries have been modified; and new Agreement has been set up by the USAEC with Indonesia. The EURATOM agreement provides assurance of availability of special nuclear materials for certain EURATOM projects. Countries whose Agreements have been modified include Brazil, Canada, Greece, Israel, New Zealand, Philippines, Switzerland, Thailand, Portugal, Argentina, and Formosa. While the Agreement with Indonesia is the standard type, it is limited at that country's request to the nuclear research and training project at the Bandung Institute of Technology. (Other INTERNATIONAL NEWS, p.2 this LETTER.)

Agreement providing for amalgamation of Stanleigh Uranium Mining Corp., Ltd., and Preston East Dome Mines, Ltd., subject to approval of bondholders and stockholders, will join the two organizations into new company to be known as Preston Mines, Ltd. Its authorized capitalization will be 5 million 4% cumulative redeemable preference shares (50¢ par) and 10 million common shares. Stanleigh shareholders would receive one preference share for each Stanleigh share. Preston East Dome shareholders would receive one common share for each share now held. Rio Tinto Mining Co. of Canada would buy all Preston Mines preference shares at 50¢ per share, tendered 90 days after effective date of the agreement. The proposed amalgamation provides for shutting down the Stanleigh mine and mill. Preston is to sell a portion of its contract to Rio Algom Mines for \$8,214,240 covering 1,308,000 lbs. of uranium oxide, payable \$4 million on June 30, 1961 and \$4,214,200 on June 30, 1962. Another 1,778,000 lbs. will be produced by Rio Algom on behalf of Preston Mines for which Rio Algom will receive \$3.97 per lb. Balance of the contract will be supplied by Rio Algom at \$4.53 per lb. (Other RAW MATERIALS NEWS, p.3 this LETTER.)

General Atomic Europe, incorporated in Germany, Italy and Switzerland, and to be headquartered in Zurich, Switzerland this Fall, has been established by General Dynamics Corp., New York. Affiliated with GD's General Atomic division, General Atomic Europe will be concerned with development and establishment of high temperature, gas-cooled central station power reactor systems in the 100 megawatt region. GD people feel that such a system would be a logical evolution of the 40 megawatt high temperature gas cooled reactor prototype plant which General Atomic is now building for Philadelphia Electric Co., and other utilities comprising High Temperature Reactor Development Associates, Inc. (Other BUSINESS NEWS, p.2 this LETTER.)

New group of sixty-four patented inventions owned by the U. S. Government and developed in the course of USAEC-sponsored research and development has now been made available by the Commission on a royalty free (non-exclusive) licensing basis. These inventions, previously described in this LETTER, were issued during January, February and March, 1960. (Other PATENT NEWS, p.5 this LETTER.)



BIDS ASKED, CONTRACTS AWARDED...

BIDS ASKED: Immediate proposals have been asked by the USAEC to design, fabricate, erect on site and test a nuclear power plant for the Naval Air Facility at McMurdo Sound in Antarctica. The Commission desires to contract for the project on a fixed-price basis by Aug. 1, 1960. The plant, to be of 1500 electrical kw capacity, will use a reactor of the pressurized or boiling water type moderated and cooled with light water. It will be assembled at the factory in packages and shipped to the site for erection. The plant will be so designed and operated that radioactive wastes will be packaged and returned to the U. S. for disposal.

Bids have been asked by Aug. 16, 1960 for construction of buildings at Sandia Laboratory, N.M. Total value of the work is estimated at \$1.25 million. Bid forms, other information may be obtained from the USAEC's Albuquerque, N.M., operations office.

With deadline of July 27, 1960, bids are asked by the USAEC's Hanford operations office, Richland, Wash., for additions to the plutonium recycle test reactor facilities at Hanford Works.

CONTRACTS AWARDED: The Cities of Los Angeles and Pasadena, Calif., have been selected by the USAEC to operate a 50,000 electrical kw prototype nuclear power plant and General Electric Co.'s atomic power equipment department, San Jose, to supply a boiling water reactor of improved design for the plant. Under the proposed arrangement, the municipally-owned utilities would provide the plant site and the turbo-generator facilities; would operate the facility for the Commission for not less than five years; and purchase the steam produced by the reactor. Total estimated cost of the nuclear portion of the plant, as borne by the USAEC, would be about \$12,500,000. (It would be a prototype for a 300,000 kw reactor incorporating internal steam-water separation and other features aimed at reducing power costs.)

Contract for construction of the radioisotope development laboratory at Oak Ridge National Laboratory, Tenn., has been awarded Kaminer Construction Corp., Chamblee, Ga., on its low bid of \$992,000. The new laboratory, essentially two floors built above ground with structural steel frame and concrete block walls, will provide space for chemical engineering, hot cell, laboratory and office areas and will be located near other isotope facilities at ORNL.

Subcontract has been awarded Baldwin-Lima-Hamilton Corp., Phila., for fabrication and installation of the reactor pressure vessel for the USAEC's experimental gas cooled reactor under construction at Oak Ridge, Tenn. Award was made by H. K. Ferguson Co., prime contractor on the reactor project. The flexible prototype reactor plant, estimated to cost \$30 million, will produce approximately 22,000 net electrical kw and will provide testing facilities for the Commission's gas-cooled reactor development program. The subcontract awarded Baldwin is of the cost-reimbursable type except that it provides for a guaranteed maximum price of \$2,303,233 including the fixed fee.

Additional facilities are to be constructed at the University of Tennessee-USAEC Agricultural Research Laboratory. Fred E. Hicks Construction Co., Knoxville, Tenn., has been awarded contract on low bid of \$249,610 for construction of the new facilities. The broadened research the new facilities will permit will be aimed primarily at determining basic body changes and effects of whole-body external irradiation on large mammals of relatively long life that have a structure comparable in some respects to humans. Various levels of radiation and a variety of radioisotopes will be used.

ATOMIC ENERGY BUSINESS NEWS...

NUCLEAR POWER STATION BUILDING PROGRAM SLOWED: Reduction by Great Britain in the number of nuclear power stations to be commissioned in the next seven years is set out in recent White Paper to Parliament. Under an accelerated program announced in March, 1957, the Government planned to build nuclear power stations at a rate that would put into the national grid from 5 million to 6 million nuclear generated kw by 1965. This date was later extended to 1966. The original program for nuclear power generation would have cost £530,000,000. Under the recently announced revision, costs will be £410,000,000. The Government will continue to place orders for nuclear stations at the rate of about one per year. It is hoped that with technical improvements constantly being incorporated their capacity will be increased and the objectives set for 1966 will be achieved two years later.



BIDS ASKED, CONTRACTS AWARDED...

BIDS ASKED: Immediate proposals have been asked by the USAEC to design, fabricate, erect on site and test a nuclear power plant for the Naval Air Facility at McMurdo Sound in Antarctica. The Commission desires to contract for the project on a fixed-price basis by Aug. 1, 1960. The plant, to be of 1500 electrical kw capacity, will use a reactor of the pressurized or boiling water type moderated and cooled with light water. It will be assembled at the factory in packages and shipped to the site for erection. The plant will be so designed and operated that radioactive wastes will be packaged and returned to the U. S. for disposal.

Bids have been asked by Aug. 16, 1960 for construction of buildings at Sandia Laboratory, N.M. Total value of the work is estimated at \$1.25 million. Bid forms, other information may be obtained from the USAEC's Albuquerque, N.M., operations office.

With deadline of July 27, 1960, bids are asked by the USAEC's Hanford operations office, Richland, Wash., for additions to the plutonium recycle test reactor facilities at Hanford Works.

CONTRACTS AWARDED: The Cities of Los Angeles and Pasadena, Calif., have been selected by the USAEC to operate a 50,000 electrical kw prototype nuclear power plant and General Electric Co.'s atomic power equipment department, San Jose, to supply a boiling water reactor of improved design for the plant. Under the proposed arrangement, the municipally-owned utilities would provide the plant site and the turbo-generator facilities; would operate the facility for the Commission for not less than five years; and purchase the steam produced by the reactor. Total estimated cost of the nuclear portion of the plant, as borne by the USAEC, would be about \$12,500,000. (It would be a prototype for a 300,000 kw reactor incorporating internal steam-water separation and other features aimed at reducing power costs.)

Contract for construction of the radioisotope development laboratory at Oak Ridge National Laboratory, Tenn., has been awarded Kaminer Construction Corp., Chamblee, Ga., on its low bid of \$992,000. The new laboratory, essentially two floors built above ground with structural steel frame and concrete block walls, will provide space for chemical engineering, hot cell, laboratory and office areas and will be located near other isotope facilities at ORNL.

Subcontract has been awarded Baldwin-Lima-Hamilton Corp., Phila., for fabrication and installation of the reactor pressure vessel for the USAEC's experimental gas cooled reactor under construction at Oak Ridge, Tenn. Award was made by H. K. Ferguson Co., prime contractor on the reactor project. The flexible prototype reactor plant, estimated to cost \$30 million, will produce approximately 22,000 net electrical kw and will provide testing facilities for the Commission's gas-cooled reactor development program. The subcontract awarded Baldwin is of the cost-reimbursable type except that it provides for a guaranteed maximum price of \$2,303,233 including the fixed fee.

Additional facilities are to be constructed at the University of Tennessee-USAEC Agricultural Research Laboratory. Fred E. Hicks Construction Co., Knoxville, Tenn., has been awarded contract on low bid of \$249,610 for construction of the new facilities. The broadened research the new facilities will permit will be aimed primarily at determining basic body changes and effects of whole-body external irradiation on large mammals of relatively long life that have a structure comparable in some respects to humans. Various levels of radiation and a variety of radioisotopes will be used.

ATOMIC ENERGY BUSINESS NEWS...

NUCLEAR POWER STATION BUILDING PROGRAM SLOWED: Reduction by Great Britain in the number of nuclear power stations to be commissioned in the next seven years is set out in recent White Paper to Parliament. Under an accelerated program announced in March, 1957, the Government planned to build nuclear power stations at a rate that would put into the national grid from 5 million to 6 million nuclear generated kw by 1965. This date was later extended to 1966. The original program for nuclear power generation would have cost £530,000,000. Under the recently announced revision, costs will be £410,000,000. The Government will continue to place orders for nuclear stations at the rate of about one per year. It is hoped that with technical improvements constantly being incorporated their capacity will be increased and the objectives set for 1966 will be achieved two years later.

BIDS ASKED, CONTRACTS AWARDED...

BIDS ASKED: Immediate proposals have been asked by the USAEC to design, fabricate, erect on site and test a nuclear power plant for the Naval Air Facility at McMurdo Sound in Antarctica. The Commission desires to contract for the project on a fixed-price basis by Aug. 1, 1960. The plant, to be of 1500 electrical kw capacity, will use a reactor of the pressurized or boiling water type moderated and cooled with light water. It will be assembled at the factory in packages and shipped to the site for erection. The plant will be so designed and operated that radioactive wastes will be packaged and returned to the U. S. for disposal.

Bids have been asked by Aug. 16, 1960 for construction of buildings at Sandia Laboratory, N.M. Total value of the work is estimated at \$1.25 million. Bid forms, other information may be obtained from the USAEC's Albuquerque, N.M., operations office.

With deadline of July 27, 1960, bids are asked by the USAEC's Hanford operations office, Richland, Wash., for additions to the plutonium recycle test reactor facilities at Hanford Works.

CONTRACTS AWARDED: The Cities of Los Angeles and Pasadena, Calif., have been selected by the USAEC to operate a 50,000 electrical kw prototype nuclear power plant and General Electric Co.'s atomic power equipment department, San Jose, to supply a boiling water reactor of improved design for the plant. Under the proposed arrangement, the municipally-owned utilities would provide the plant site and the turbo-generator facilities; would operate the facility for the Commission for not less than five years; and purchase the steam produced by the reactor. Total estimated cost of the nuclear portion of the plant, as borne by the USAEC, would be about \$12,500,000. (It would be a prototype for a 300,000 kw reactor incorporating internal steam-water separation and other features aimed at reducing power costs.)

Contract for construction of the radioisotope development laboratory at Oak Ridge National Laboratory, Tenn., has been awarded Kaminer Construction Corp., Chamblee, Ga., on its low bid of \$992,000. The new laboratory, essentially two floors built above ground with structural steel frame and concrete block walls, will provide space for chemical engineering, hot cell, laboratory and office areas and will be located near other isotope facilities at ORNL.

Subcontract has been awarded Baldwin-Lima-Hamilton Corp., Phila., for fabrication and installation of the reactor pressure vessel for the USAEC's experimental gas cooled reactor under construction at Oak Ridge, Tenn. Award was made by H. K. Ferguson Co., prime contractor on the reactor project. The flexible prototype reactor plant, estimated to cost \$30 million, will produce approximately 22,000 net electrical kw and will provide testing facilities for the Commission's gas-cooled reactor development program. The subcontract awarded Baldwin is of the cost-reimbursable type except that it provides for a guaranteed maximum price of \$2,303,233 including the fixed fee.

Additional facilities are to be constructed at the University of Tennessee-USAEC Agricultural Research Laboratory. Fred E. Hicks Construction Co., Knoxville, Tenn., has been awarded contract on low bid of \$249,610 for construction of the new facilities. The broadened research the new facilities will permit will be aimed primarily at determining basic body changes and effects of whole-body external irradiation on large mammals of relatively long life that have a structure comparable in some respects to humans. Various levels of radiation and a variety of radioisotopes will be used.

ATOMIC ENERGY BUSINESS NEWS...

NUCLEAR POWER STATION BUILDING PROGRAM SLOWED: Reduction by Great Britain in the number of nuclear power stations to be commissioned in the next seven years is set out in recent White Paper to Parliament. Under an accelerated program announced in March, 1957, the Government planned to build nuclear power stations at a rate that would put into the national grid from 5 million to 6 million nuclear generated kw by 1965. This date was later extended to 1966. The original program for nuclear power generation would have cost £530,000,000. Under the recently announced revision, costs will be £410,000,000. The Government will continue to place orders for nuclear stations at the rate of about one per year. It is hoped that with technical improvements constantly being incorporated their capacity will be increased and the objectives set for 1966 will be achieved two years later.

ATOMIC ENERGY FINANCIAL NEWS...

MUTUAL FUND MERGER: Proposed merger of Axe Science & Electronics Corp. with Missiles-Jets & Automation Fund will be presented to stockholders of the two funds at special meetings July 26. According to the merger agreement, Axe Science will acquire the assets of the \$4.6 million Missiles Fund in exchange for Axe Science shares of equivalent value. Combined assets of the two funds (as of June 15) amount to \$18,687,000. Axe Science, started in February 1955, holds shares of companies in various phases of nuclear work: equipment manufacture, uranium mining and milling; power production; etc. Missiles Fund commenced operations August 1958. Both are open-end management investment companies attempting long-term capital growth through investments in companies in nuclear, electronic, and other scientific fields. (New investment adviser will be set up for the combined funds. E. W. Axe will be chairman and director; Ruth H. Axe president and director.)

URANIUM MINING & MILLING GENERALLY PROFITABLE FOR CANADIAN OPERATORS: Reconciled to ending economic uranium operations in 1962, Canadian producers have adjusted operations and in the main expect to wind up their affairs when current contracts expire in 1962.

Bicroft Uranium Mines, at its recent annual meeting, told shareholders that an estimated profit of \$1,688,567 before allowance for depreciation and write-offs was earned, during the first five months of this year. Bicroft has ample reserves to complete its present contracts for uranium precipitates. R. A. Bryce, president, told the meeting that operations should wind up in 1962 with considerable cash in the treasury.

Operating profit estimated at \$1,087,284 was earned by Stanrock Uranium Mines in May, exceeding the previous record established in March and ahead of the \$892,518 earned in April. Payments are being made on schedule to secured creditors (the company is operating under a bankruptcy trustee) and debt retirement of some \$908,714 was made.

Rio Algom Mines shares are now listed for trading on the Toronto Stock Exchange. Shares of the newly listed company replace those of the four companies which are being merged into Rio Algom: Milliken Lake Uranium Mines, Northspan Uranium Mines, Pronto Uranium Mines, and Algom Uranium Mines. (Uranium production is being continued at the two Algom plants, Quirke and Noric; the Milliken Lake concentrator; and the Panel operation of Northspan. The Pronto plant is being rearranged to permit milling copper ore from its Pater property. The Northspan Lacnor plant and Pronto ceased uranium production during recent months.)

RAW MATERIALS...prospecting, mining, marketing...

UNITED STATES: Discovery of beryllium minerals in the Topaz Mountain area of Western Utah has brought exploration parties into the area from Vitro Minerals Corp.; Beryllium Resources, Inc.; Du Pont; Food Machinery and Chemical Corp.; and others. Vitro Minerals Corp., half-owned by Vitro Corp. of America, and Rochester & Pittsburgh Coal Co., Indiana, Pa., is one of the largest claim holders in the area. The new ore is found in disseminated non-pegmatitic deposits, much of its lying close to the surface where it can be mined by modern open-pit mining techniques. Vitro geologists also believe that it may be a new mineral form of beryllium. Studies indicate that it may permit economic processing by the acid leach route, same method now being used to process uranium ores at Vitro's Salt Lake City mill. (During 1959, according to Government figures, domestic consumption of beryl was at an all-time high of 8,173 short tons while domestic production sank to 328 tons, lowest point since 1948.)

MEXICO: Beryllium Resources, Inc., Los Angeles, has signed an agreement with the Mexican government to explore for beryllium and mine it in Mexico. The company is owned jointly by Atlas Corp., New York investment firm, and Federal Resources Corp., in which control is held by Floyd B. Odum. Mr. Odum retired last month as chairman of Atlas. President of Beryllium Resources is Bruce W. Odum, son of Floyd Odum. Beryllium Resources, under its agreement, would work as an agent for Mexico's Atomic Energy Commission in selling the metal on the world market. The firm is to be reimbursed by the Mexican government for its exploration and mining costs, and is to receive a percentage of sales proceeds. (Beryllium Resources said it had made an agreement with Brush Beryllium Co., Cleveland, concerning plants for handling any economic beryllium deposits found in Mexico. It is believed that the World Bank may assist in the financing of such plants.)

NEW PRODUCTS, PROCESSES, INSTRUMENTS...

NEW PRODUCTS: Manual sample changer, Model MSC-1, includes detector and pre-amplifier as an integral part of the shield. This arrangement is said to provide virtually 4 pi shielding with 2-inches of lead thereby insuring minimum background. Designed for counting soft beta radiation from such isotopes as carbon-14, nickel-63, or sulphur-35, Model MSC-1 can count alpha radiation in the presence of beta and can discriminate between beta radiation of various energies when operated in the proportional region. --Technical Associates, Burbank, Calif.

Ionization for a new line of vacuum gages is provided by the weak radioactive emission of tritium. The tritium forms part of the inner metal surface of the device. Its radiation energy is converted into excitation of residual gas molecules, leading to a considerable current multiplication. Sensitivity of the gauge covers the range from 0.001 mm. to 100 mm. --Radiation Research Corp., New York 21.

Series SC-750 scalars of this manufacturer count random events at a maximum rate of over 1 million counts per sec. Resolving time is said to be less than one micro second. --Eldorado Electronics, Berkeley 10, Calif.

PRODUCT NEWS: Counter tubes for nuclear and other electronic applications are under a new pricing structure at Sylvania Electric Products, Inc., Williamsport, Pa. An example are high speed (100 kc) types which have been reduced 23 to 34 per cent. Under the new structure, counter tubes can be obtained in quantities of 1 through 24 at original equipment prices with a full six-month guarantee.

New 100-kv. x-ray source uses as active element strontium-90 and yttrium-90 distributed in matrix of target material. Produced by U. S. Nuclear, Burbank, Calif., the company suggests such uses as level, density and thickness gaging, etc.

U. S. consumption of thorium, as the oxide, increased 11% in 1959 to 192,000-lbs., according to latest Government figures. In 1958, consumption was 20% over the previous year. However, thorium applications in 1960 are expected to stay at the 1959 level. Outside the nuclear field chief uses are in gas mantles, magnesium-thorium alloys, sand castings, and refractories.

A uniform dispersion of boron in stainless steel, trade-named Bo-Stan, is now offered for applications in reactor control by Sintercast Division of Chromally Corp., Yonkers 2, N.Y. The boron-stainless composite is prepared by the Sinter-wrought process, an advanced powder metallurgy technique developed by Sintercast. After sintering and hot-working, the composite is said to be as fully dense, ductile, and strong as a cast alloy of equivalent composition.

MANUFACTURERS' NEWS: Increased demand in the European market for its products has prompted move by Tracerlab (Holland) N.V. to larger quarters in Amsterdam. The company feels that one of the factors leading to its increased sales volume is the current expansion of the nuclear equipment market on the Continent similar in some measure to that in the U. S. about four or five years ago.

Nuclear research reactor will be supplied by Allis-Chalmers Manufacturing Co., Milwaukee, to South African Atomic Energy Board. Estimated cost is \$3 million.

A 1,000 kw swimming pool-type research reactor, to be supplied by AMF Atomics, Inc., to the Government of Turkey, will be financed in part by grant of \$350,000 from the U. S. to that country toward its cost. Turkey will be the twentieth country to receive such a grant. The reactor, which will be designed to use solid fuel elements containing enriched uranium to be leased from the U. S., will be part of a \$2,800,000 nuclear research and training center under the jurisdiction of the Turkish Atomic Energy Commission.

Calcium carbonate certified to be free of strontium-90, and previously offered by Special Preparations Co., New York, to combat uptake of strontium-90, is now offered in a prenatal preparation. Since one of the most important dietary sources of calcium is milk and dairy products, and this food is most likely to be contaminated with strontium-90, the preparation is offered as a dietary supplement. This serves the double purpose of decreasing by about half the amount of strontium-90 absorbed from the diet, and at the same time supplies additional needed calcium. (It has been found that the uptake of strontium-90 is greatest during those periods of development when bone growth is taking place.)

ATOMIC ENERGY PATENT DIGEST...

PATENTS ISSUED June 21, 1960 to PRIVATE ORGANIZATIONS AND/OR INDIVIDUALS:

(1) Alloy especially suited to cladding nuclear fuel elements. Noble N. Ida, John J. Mueller, inventors. No. 2,941,883 assigned to The Martin Co. (2) Compounds of zirconium and methods of preparing them. Reginald S. Dean, inventor. No. 2,941,931 assigned to Chicago Development Corp., Riverdale, Md. (3) Batteryless radiation indicator. Kurt Lehovec, inventor. No. 2,942,110 assigned to Sprague Electric Co., N. Adams, Mass. (4) Contoured logging sonde. Albert E. Worthington, inventor. No. 2,942,111 assigned to California Research Corp., San Francisco, Calif. (5) Multiple well logging system. Daniel P. Hearn, inventor. No. 2,942,112 assigned to Well Surveys, Inc., Tulsa, Okla. (6) Measuring system. Neil E. Handel, inventor. No. 2,942,113 assigned to Industrial Nucleonics Corp. (7) X-ray control system. Frank X. McNally, inventor. No. 2,942,114 assigned to Westinghouse Electric Corp., E. Pittsburgh, Pa.

PATENTS ISSUED June 21, 1960 to GOVERNMENTAL ORGANIZATIONS: (1) Non-permanent radiation shield structure. Thomas J. O'Connell, inventor. No. 2,942,115 assigned to Secretary of the Navy. (2) Fuel element for nuclear reactor. William E. Roake, Ersal A. Evans, Daniel W. Brite, inventors. No. 2,941,933 assigned to USAEC. (3) Scintillation spectrometer. Persa R. Bell, John E. Francis, inventors. No. 2,942,109 assigned to USAEC. (4) Neutron absorption and shielding device. Irving R. Axelrad, inventor. No. 2,942,116 assigned to USAEC.

PATENTS ISSUED June 28, 1960 to PRIVATE ORGANIZATIONS AND/OR INDIVIDUALS:

(1) Method for producing zirconium metal. George W. Doyle, inventor. No. 2,942,969 assigned to National Lead Co., New York, N.Y. (2) Inhibitors to transfer of structural material constituents in liquid sodium. John W. Mausteller, inventor. No. 2,943,034 assigned to Mine Safety Appliances Co., Pittsburgh, Pa. (3) Apparatus for refueling a nuclear reactor. Donald Kallman, inventor. No. 2,943,035 assigned to Babcock & Wilcox Co., New York. (4) Radioactive measurement of the flow rate of a moving bed. Donald E. Hull, Clayton S. Huey, inventors. No. 2,943,045 assigned to California Research Corp., San Francisco, Calif. (5) Indicator. Carl Eickhoff, Bottrop, Germany, inventor. No. 2,943,196 issued to inventor of record. (5) Method of well logging. Leendert de Witte, inventor. No. 2,943,197 assigned to Continental Oil Co., Ponca City, Okla. (7) Ray sensitive screen and associated apparatus. Robert Godbarsen, Jr., inventor. No. 2,943,198 assigned to General Electric Co., New York. (8) Fixed-channel spectrometer for radioactivity. Wilfred R. Konneker, inventor. No. 2,943,199 assigned to Nuclear Corp. of America, Denville, N.J. (9) Stable isotope method for well logging. James A. Rickard, inventor. No. 2,943,200 assigned to Jersey Production Research Co., Tulsa, Okla. (10) Shielded container. Neil F. Ritchey, inventor. No. 2,943,203 assigned to Knapp Mills, Inc., Long Island City, N.Y.

PATENTS ISSUED June 28, 1960 to GOVERNMENTAL ORGANIZATIONS: (1) Adsorption-bismuth phosphate method for separating plutonium. Edwin R. Russell, Arthur W. Adamson, George E. Boyd, inventors. No. 2,942,937 assigned to USAEC. (2) Method of dissolving massive plutonium. John F. Facer, Ward L. Lyon, inventors. No. 2,942,938 assigned to USAEC. (3) Separation of plutonium values from other metal values in aqueous solutions by selective complexing and adsorption. Roy H. Beaton, inventor. No. 2,942,939 assigned to USAEC. (4) Process for separating iodine-132 from fission products. Margaret W. Greene, George Samos, inventors. No. 2,942,943 assigned to USAEC. (5) Process of preparing zirconium oxychloride. Harley A. Wilhelm, Maurice L. Andrews, inventors. No. 2,942,944 assigned to USAEC. (6) Crane positioning apparatus. Frank W. Landsiedel, Herbert Wolff, inventors. No. 2,942,736 assigned to USAEC. (7) Method of separating uranium from alloys. Premo Chiotti, Howard E. Shoemaker, inventors. No. 2,942,968 assigned to USAEC. (8) Constant viscosity radiation resistant lubricant and method of using it. Robert O. Bolt, James G. Carroll, inventors. No. 2,943,056 assigned to USAEC. (9) Heating and cooling system for calutron. Allan M. Starr, inventor. No. 2,943,195 assigned to USAEC. (10) Transformer for joining unbalanced to balanced transmission means. Burt J. Bitner, Raymond H. Opperman, inventors. No. 2,943,275 assigned to USAEC.

Sincerely,

The Staff,
ATOMIC ENERGY NEWSLETTER

July 5, 1960.